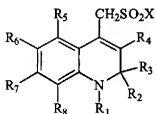
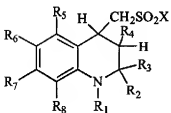


AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1. (Withdrawn) A process for the production of dihydroquinoline compounds of the general formula Ia or of tetrahydroquinoline compounds of the general formula Ib



Ia



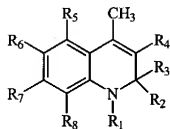
Ib

in which R₁ denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

R₂, R₃, R₄, R₅, R₆, R₇ and R₈ on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R₁ and R₈ together form a ring system and

X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or/and one or more substituents,

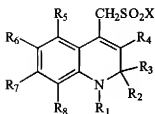
wherein
the corresponding compounds I'a



I'a

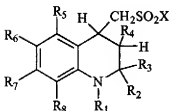
are sulfonated to form Ia (X = OH) and optionally converted by hydrogenation into Ib (X = OH).

2. (Withdrawn) The process as claimed in claim 1, wherein the sulfonation is carried out by means of concentrated sulfuric acid.
3. (Withdrawn) The process as claimed in claim 1, wherein the sulfonic acid group formed in the sulfonation is derivatized.
4. (Withdrawn) The process as claimed in claim 3, wherein the sulfonic acid group is converted into a sulfochloride.
5. (Withdrawn) The process as claimed in claim 3, wherein the sulfochloride group is reacted with a primary or secondary amine to form a sulfonamide.
6. (Withdrawn) A dihydroquinoline compound of the general formula Ia or a tetrahydroquinoline compound of the general formula Ib



Ia

Ib



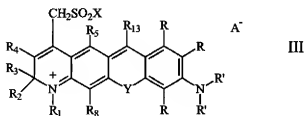
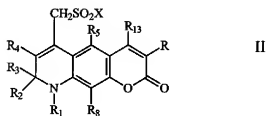
in which R_1 denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

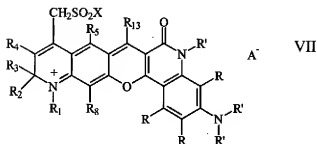
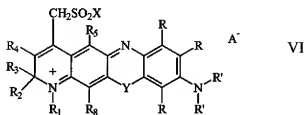
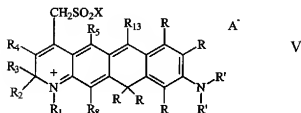
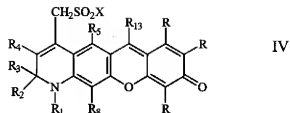
R_2 , R_3 , R_4 , R_5 , R_6 , R_7 and R_8 on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R_1 and R_8 together form a ring system and

X denotes OH, halogen, $-O-R_9$, $-S-R_{10}$ or $-NR_{11}R_{12}$ where R_9 , R_{10} , R_{11} and R_{12} each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or/and one or more substituents, in particular $-SO_3H$, $-PO_3H_2$ and $-COOH$.

7. (Withdrawn) The compound as claimed in claim 6,
wherein R_1 represents an aryl or alkyl residue and in particular a C5 to C15 aryl or a C1 to C20 alkyl residue, R_2 and R_3 are methyl and R_4 denotes hydrogen.

8. (Withdrawn) The compound as claimed in claim 6, wherein R_7 represents a hydroxy or methoxy residue.
9. (Withdrawn) The compound as claimed in claim 6 wherein R_8 represents a nitroso group.
10. (Withdrawn) The compound as claimed in claim 6 wherein R_6 represents a formyl or a hydroxymethyl group.
11. (Withdrawn) The compound as claimed in claim 6, wherein X denotes halogen and in particular Cl.
12. (Withdrawn) The compound as claimed in claim 6, wherein -X represents the residue $-NR_{11}R_{12}$
13. (Withdrawn) A process for the production of dyes of the general formulae II to VII containing $-SO_2X$





in which R_1 , R_2 , R_3 , R_4 , R_5 and R_8 are defined as in claims 1 to 12, R on each occurrence can be the same or different and is defined as for R_1 , R_2 , R_3 , R_4 , R_5 and R_8 and R' on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R and R' together form a ring system which can contain one or more double bonds,

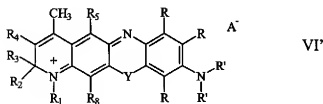
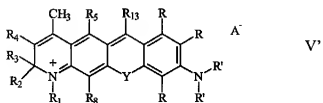
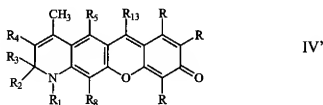
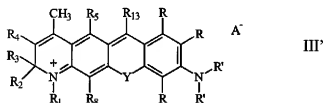
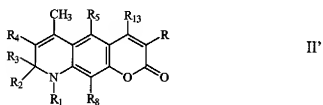
R_{13} on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

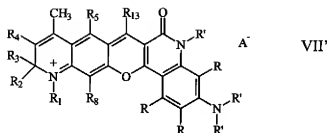
where R_{13} in particular represents hydrogen, aryl, carboxyphenyl, alkyl, perfluoroalkyl, cycloalkyl, pyridyl or carboxypyridyl,

X denotes OH, halogen, $-O-R_9$, $-S-R_{10}$ or $-NR_{11}R_{12}$ where R_9 , R_{10} , R_{11} and R_{12} each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or one or more substituents, and

Y in formula III denotes O, S or Se and Y in formula VI denotes O, S or $C(R)_2$,
wherein

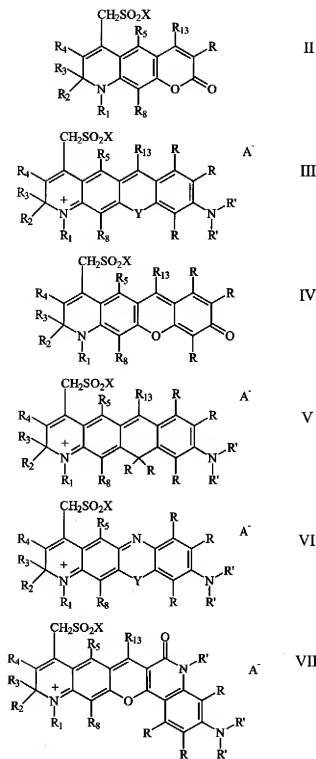
corresponding compounds of formulae II' to VII'





are sulfonated with the proviso that for compounds of formula III in which Y = O and for compounds of formula IV, X does not denote OH.

14. (Withdrawn) A method for producing polycyclic dyes comprising using a compound as claimed in claim 6 or a compound obtained by the process as claimed in claim 1.
15. (Withdrawn) The method as claimed in claim 14 wherein the polycyclic dyes are of formulae II to VII.
16. (Withdrawn) A process for the production of polycyclic dyes, wherein compounds which have a dihydroquinoline end group with a 4-methyl group are sulfonated and optionally hydrogenated to form a tetrahydroquinoline with the proviso that the polycyclic dye is not a compound of formula III in which Y = O and X = OH or of formula IV in which X = OH.
17. (Withdrawn) The polycyclic dye produced according to the process as claimed in claim 13.
18. (Currently amended) A polycyclic dye of the general formulae II to VII



in which

R' denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and

one or more substituents,

R on each occurrence and independently of one another denotes hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R' and R together form a ring system which can contain one or more multiple bonds,

in which R₁ denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, R₂, R₃, R₄, R₅, and R₆ on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R₁ and R₆ together form a ring system and

R₁₃ on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, where R₁₃ in particular represents hydrogen, aryl, carboxyphenyl, alkyl, perfluoroalkyl, cycloalkyl, pyridyl or carboxypyridyl,

X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or one or more substituents, and

Y in formula III denotes O, S or Se and Y in formula VI denotes O, S or C(R)₂,

with the proviso that the dye is not a compound of the general formula III in which Y = O and X = OH or of the general formula IV in which X = OH.

19. (Currently amended) The polycyclic dye as claimed in claim 47 18 wherein X denotes halogen.
20. (Currently amended) The polycyclic dye as claimed in claim 47 18, wherein X represents the residue $-NR_{11}R_{12}$ ~~as in claim 18~~.
21. (Currently amended) The polycyclic dye as claimed in claim 20, wherein at least one of $-R_{11}$ ~~or~~ and R_{12} represents an alkyl or aryl residue substituted with $-COOH$.
22. (Currently amended) In a method for the detection of an analyte in a sample, the improvement which comprises using a labeled receptor for the analyte, wherein the label is a compound of claim 47 18.
23. (Previously presented) The method as claimed in claim 22, wherein the analyte is a peptide or nucleotide.
24. (Previously presented) The method as claimed in claim 22, wherein the dye is binding to an NH_2 or SH group of the analyte.
25. (Currently amended) The method of claim 22, wherein the label is a ~~dye as claimed in claim 10 in which the dye is bound by coupling to an amino group of the analyte.~~
26. (Currently amended) The method of claim 22, wherein the label is ~~a dye as claimed in claim 21 and wherein the dye which is activated as an NHS ester is bound by coupling to an amino group of the analyte.~~
27. (Currently amended) The method of claim 22, wherein the label is ~~a dye as claimed in claim 47 or is coupling to another dye.~~

28. (Currently amended) The method of claim 22, ~~wherein the label is as claimed in claim 27~~, wherein the label is coupled via an amino group of the other dye to thus form a FRET pair.
29. (Previously presented) The polycyclic dye as claimed in claim 19, wherein X denotes chlorine.